

**ABSTRACT OF THE DISCLOSURE**

The invention includes mainly a machine base, a carriage, a sliding control mechanism, a clamp mechanism, a horizontal shifting mechanism, and a lifting mechanism. The FOUP  
5 (front-opening unified pod) is put on the carriage and held down by a clamp plate of the clamp mechanism, and then moved and contacted to a gate on an access at a backboard of the machine base, and then a cover of the FOUP is opened by a cover close/open control mechanism at the back of the gate, and then the cover is  
10 carried backwardly away from the FOUP by the horizontal shifting mechanism and then lowered with the lifting mechanism. The cover is closed on the FOUP when reversing the procedure. The automatic FOUP cover closing/opening operation prevents wafers from contamination.

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